

AMENDMENTS TO THE CLAIMS

Claims 1-26 (deleted)

27. (new) A method of evaluating the reception quality in a stereo radio receiver comprising a receiver for generating the stereo multiplex signal from which a decoder generates the signal and, via an auxiliary carrier, generates the top and the bottom side-band of the signal, where a criterion for evaluating the quality of reception is derived from the signal energy or power of the top and bottom side-band of the signal.

28. (new) A method according to claim 27, where the criterion for evaluating the reception quality is derived from a comparison between the signal energy or power of the top side-band with that of the bottom side-band of the signal and where the reception quality decreases when the difference between the two signal energies or powers increases, increases when the difference decreases, and is at a maximum when they are the same.

29. (new) A method according to claim 27, where the criterion for evaluating the reception quality is derived from cross-correlation of the signals or of the power of the top and the bottom side-band of the signal and where the reception quality increases with increasing correlation and decreases with decreasing correlation.

30. (new) A method according to claim 27, where the bottom side-band is filtered by a first bandpass filter and the top side-band is filtered by a second bandpass filter.

31. (new) A method according to claim 30, where the centre frequency of the first bandpass filter is 31 KHz and that of the second bandpass filter is 45 KHz.

32. (new) A method according to claim 30, where the pass bands of the two bandpass filters do not overlap.

33. (new) A method according to claim 30, where the two bandpass filters are second-order Butterworth bandpass filters.

34. (new) A method according to any of claims 30, where the output signal of the first bandpass filter is shifted into the base band position by mixing with the 38 KHz auxiliary carrier in a first mixer and then filtered in a first low-pass filter and the output signal from the second bandpass filter is shifted into the base band position by mixing with the 38 KHz auxiliary carrier and then filtered in a second low-pass filter.

35. (new) A method according to claim 34, where the energy or power of the output signal from the first low-pass filter is compared with that of the second low-pass filter and the criterion for the quality of reception is derived from a comparison between the two energies or powers and where the reception quality decreases when the difference between the two energies or powers increases, increases when the difference decreases and is at a maximum when they are the same.

36. (new) A method according to claim 34, where the cross-correlation is obtained from the output signal of the first low-pass filter and the output signal of the second low-pass filter and where the reception quality increases with increasing correlation and decreases with decreasing correlation.

37. (new) A stereo radio receiver comprising a receiver for generating the stereo multiplex signal and a decoder for generating the signal and the top and bottom side-band of the signal from the stereo multiplex signal via an auxiliary carrier, where a criterion for evaluating the

quality of reception is derived from the signal energy or power of the top and bottom side-band of the signal.

38. (new) A stereo radio receiver according to claim 37, where the criterion for evaluating the reception quality is derived from a comparison between the signal energy or power of the top side-band with that of the bottom side-band of the signal and where the reception quality decreases when the difference between the two signal energies or powers increases, increases when the difference decreases, and is at a maximum when they are the same.

39. (new) A stereo radio receiver according to claim 37, where the criterion for evaluating the reception quality is derived from cross-correlation of the signals or of the power of the top and the bottom side-band of the signal and where the reception quality increases with increasing correlation and decreases with decreasing correlation.

40. (new) A stereo radio receiver according to claim 38, where a first bandpass filter is provided for filtering the bottom side-band and a second bandpass filter is provided for filtering the top side-band of the signal.

41. (new) A stereo radio receiver according to claim 40, where the centre frequency of the first bandpass filter is 31 KHz and that of the second bandpass filter is 45 KHz.

42. (new) A stereo radio receiver according to claim 40, where the pass bands of the two bandpass filters do not overlap.

43. (new) A stereo radio receiver according to claim 40, where the two bandpass filters are second-order Butterworth bandpass filters.

44. (new) A stereo radio receiver according to any of claims 40, where the output of the first bandpass filter is shifted into the base band position by mixing with the 38 KHz auxiliary carrier in a first mixer and then filtered in a first low-pass filter and the output signal from the second bandpass filter is shifted into the base band position by mixing with the 38 KHz auxiliary carrier and then filtered in a second low-pass filter.

45. (new) A stereo radio receiver according to claim 44, where in that the energy or power of the output signal from the first low-pass filter is compared with that of the second low-pass filter and the criterion for the quality of reception is derived from a comparison between the two energies or powers, and where the reception quality decreases when the difference between the two energies or powers increases, increases when the difference decreases and is at a maximum when they are the same.

46. (new) A stereo radio receiver according to claim 44, where the cross-correlation is obtained from the output signal of the first low-pass filter and the output signal of the second low-pass filter and where the reception quality increases with increasing correlation and decreases with decreasing correlation.

47. (new) A stereo radio receiver according to claim 46, where the signal is received at the input of the first bandpass filter and the second bandpass filter, the output of the first bandpass filter is connected to the first input of the first mixer whose second input receives the auxiliary carrier, the output of the second bandpass filter is connected to the first input of the second mixer, whose second input receives the auxiliary carrier, the output of the first mixer is connected to the input of a first low-pass filter, whose output is connected to the first input of a unit for generating the cross-correlation, the output of the second mixer is connected to the input

of a second low-pass filter whose output is connected to the second input of the unit for obtaining the cross-correlation, and a quality signal for measuring the quality of reception can be tapped from the output of the unit for obtaining the cross-correlation.

48. (new) A stereo radio receiver according to claim 47, where the output of the unit for obtaining the cross-correlation is connected to the input of a control unit whose output is connected to the control input of the receiver or of an antenna selection switch.

49. (new) A stereo radio receiver according to claim 47, where the bandpass filters are second-order Butterworth bandpass filters.

50. (new) A stereo radio receiver according to claim 47, where the pass bands of the two bandpass filters do not overlap.

51. (new) A stereo radio receiver according to any of claims 47, where the centre frequency of the first bandpass filter is 31 KHz and the centre frequency of the second bandpass filter is 45 KHz.

52. (new) A stereo radio receiver according to any of claims 47, where the auxiliary carrier has a frequency of 38 KHz.

Respectfully submitted,

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